

Maximising Non-Domestic Smart Meter Consumer Benefits

Consultation on improving the data offer and enabling innovation

Closing date: 24 September 2021, 10.00am



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General information

Why we are consulting

We are consulting on proposals to improve the non-domestic smart meter consumer data offer, to support non-domestic customers to use the data from their smart meters to save energy and manage costs. Additionally, we are seeking more general views from consultees on how best Government can support industry to drive forward innovation in this market.

How to respond

Issued: 5 July

Respond by: 24 September, 10.00am

Please email enquiries and responses to: smartmetering@beis.gov.uk

Consultation reference: "Maximising Non-Domestic Smart Meter Consumer Benefits: Consultation on improving the data offer and enabling innovation"

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Audiences:

We are seeking views from a diverse range of stakeholders across the energy supply, innovation, small business and consumer representative communities.

Territorial extent:

This consultation applies to the gas and electricity markets in Great Britain. Responsibility for energy markets in Northern Ireland lies with the Northern Ireland Executive's Department of Economy.

Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

We will summarise all responses and publish this summary on <u>GOV.UK</u>. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

Quality assurance

This consultation has been carried out in accordance with the government's <u>consultation</u> <u>principles</u>.

If you have any complaints about the way this consultation has been conducted, please email: beis.bru@beis.gov.uk.

Executive Summary

Context

Smart meters are replacing traditional gas and electricity meters in homes, small businesses and schools across Great Britain as part of an important upgrade to the national energy infrastructure and underpinning the cost-effective delivery of Government's net zero commitment. They are a critical tool in the transition to a low carbon energy system, for example by enabling incentives for consumers to use energy when renewable generation is available and automatic charging of electric vehicles when prices are low. A key benefit of the transition to smart meters is that the energy data that they record will be used by consumers to engage with, and better manage, their energy consumption.

The non-domestic smart meter mandate covers sites in electricity profile classes 1-4 or with gas consumption below 732 MWh/year.¹ As of December 2018, all microbusinesses² within the mandate must be offered a smart meter that complies with the latest Smart Metering Equipment Technical Specifications (SMETS)³ by their energy supplier. Non-microbusinesses within the mandate can be offered a choice of SMETS or Advanced Meter Reading (AMR) meter, but the choice must include SMETS meters.

The rollout of smart meters⁴ to non-domestic sites within the mandate is estimated to lead to £1.5 billion of energy savings⁵, driven by these consumers engaging with their smart meter data and identifying ways to reduce their energy use or shift their consumption to another time. Unlike for domestic households (where energy suppliers are obligated to provide smart meter customers with an In-Home Display (IHD) of their near real-time energy use), energy suppliers are not at present obligated to provide non-domestic customers with a default way of accessing or engaging with their energy consumption data.

Instead, energy suppliers are required to provide non-domestic consumers and their nominated third parties (i.e. third parties acting with consumer consent) with timely access to their consumption data upon request. To date, it had been expected that the market, particularly energy suppliers, would drive forward innovation in this space, leveraging this

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/920211/non-domestic-smart-metering-guidance.pdf

² Sites are classed as a microbusiness in licence conditions if they meet any one of the following criteria: a) They use no more than 100,000 kWh of electricity per year, b) They use no more than 293,000 kWh of gas per year, c) They have fewer than 10 employees (or their full time equivalent) and a turnover or annual balance sheet total not exceeding 2 million Euros.

³ These specify that SMETS meters must have enhanced functional, interface and data requirements- see here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/68898/smart_meters_equipment_technical_spec_version_2.pdf

⁴ Within this consultation we use the term 'smart meter' to refer interchangeably to both AMR and SMETS meters. Where we distinguish, we explicitly refer to 'AMR' or 'SMETS'.

⁵ https://www.gov.uk/government/publications/smart-meter-roll-out-cost-benefit-analysis-2019

flexibility and delivering a range of services tailored to the diverse needs of all customers in the non-domestic sector.

Collectively, our evidence base suggests that the supply market is not delivering such innovations at the pace needed to maximise the benefits of smart metering for all non-domestic consumers. We are therefore consulting on amendments to energy supply licence conditions, which have been carefully designed to balance consumer interests and the objective of market-led innovation. These proposals build upon three years of research and evaluation undertaken as part of BEIS' Non-Domestic Smart Energy Management Innovation Competition (NDSEMIC) (for which findings were published in November 2020)⁶, alongside considerations from wider BEIS business energy use policy areas. Proposals are summarised by the following sections.

Ensuring a baseline level of 'consistency' in the non-domestic smart meter offer

Section 1 sets out proposals to establish a baseline non-domestic smart meter data offer, in energy supply licence conditions, that all suppliers must meet (with the ambition that some will go further). This proposes that all non-domestic smart meter customers must be entitled to a minimum baseline of free access to information based on their energy consumption data, presented to them in a user-accessible format to allow insights into their energy consumption and usage. From the date that the policy changes come into effect, this should be provided by default to customers alongside their smart meter without them asking for it on a regular, ongoing basis. Section 1 also proposes boundaries around the timeliness of data provision to ensure it is useful to the customer, as well as proposals for energy suppliers to raise awareness of non-domestic customers' available means for freely accessing their energy consumption data.

Streamlining the smart meter data access process for a nondomestic consumer's nominated third party

Current licence conditions regarding data access are the same for non-domestic customers and their nominated third party representatives. Therefore, Section 2 sets out proposals to tailor licence conditions to the different needs of end customers versus their representatives, and to address barriers to third party data access identified through recent research. We are proposing that third parties acting with consumer consent must be entitled to a minimum baseline of free access to that consumer's energy consumption data in a machine-readable format via the internet (subject to suppliers' existing obligations regarding cyber and data security and privacy being met). Processes by which they can seek access to energy consumption data and evidence to the energy supplier that they have consumer consent must

⁶ https://www.gov.uk/government/publications/non-domestic-smart-energy-management-innovation-competition-ndsemic-evaluation-findings

be clear, transparent and publicly available. If all legal requirements are met by such a request, access must be granted within ten working days. Data provided should include at least 12 months of historic data to enable analysis of seasonal variation.

The scope of proposed licence changes

Section 3 proposes that licence changes would apply to all non-domestic customers with a smart (SMETS/AMR) meter, irrespective of profile class and/or consumption. This is to ensure consistency in the data offer across meter types and billing arrangements and to avoid consumer confusion.

Creating a policy context that facilitates non-domestic smart metering innovation, including support for industry

We recognise that generating consumer demand in this market is complex, and that Government has a role to play in supporting industry to drive cost-effective innovation that realises the benefits of smart metering for businesses and unlocks further market opportunities. Section 4 seeks views on how this can best be achieved.

Stakeholder views

We welcome stakeholder views on the proposals set out, including feedback from a diverse range of representatives across the energy supply, innovation, business and consumer representative communities.

Background

Context

- 1. Smart meters are being rolled out to non-domestic sites, as well as in domestic households across Great Britain. At the end of March 2021, there were 24.2 million smart meters in homes and small businesses across Great Britain, of which 19.8 million were smart in smart mode or advanced meters, representing 44% overall smart coverage. In June 2020 the Government confirmed its intention to implement a four-year framework to reach market-wide coverage of smart meters by 2025. This will set energy suppliers annual installation targets subject to an annual tolerance level. In June 2021, the Government confirmed the tolerance levels for the first two years of the new framework. This includes distinct tolerances for domestic and non-domestic rollouts for the duration of the framework.
- 2. There are broadly two types of smart meter in the non-domestic market. Large electricity supplies (profile classes 5-8 and 00) and large gas supplies (consumption over 732 MWh/year) are required by energy supply licence conditions (regulated by Ofgem) to have AMR meters fitted which measure consumption every half hour and transmit readings to the supplier. 10 These tend to be larger non-domestic organisations, such as industrial and commercial businesses.
- 3. Smaller sites in electricity profile classes 1-4 or with gas consumption below 732 MWh/year are covered by the smart meter mandate. Three million meters (across two million sites) are in scope of the mandate, of which 46% are already smart. These cover a range of organisations and sectors, including pubs and restaurants (hospitality), shops (retail), schools and local authority buildings (public sector). Around 70% of mandate sites are microbusinesses.
- 4. As of December 2018, all microbusinesses within the smart meter mandate must be offered a smart meter that complies with the latest Smart Metering Equipment Technical Specifications (SMETS) by their energy supplier. Non-microbusinesses within the mandate can be offered a choice of SMETS or AMR meter, but the choice must include SMETS.

⁷https://www.gov.uk/government/collections/smart-meters-statistics, May 2021

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/893124/delivering-smart-system-post-2020-govt-response-consultation.pdf

⁹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/990525/smart-meter-policy-framework-post-2020-govt-response-minimum-annual-targets.pdf

¹⁰ https://www.ofgem.gov.uk/publications-and-updates/suppliers%E2%80%99-advanced-meter-roll-out-performance

¹¹ https://www.gov.uk/government/collections/smart-meters-statistics

¹² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/800872/Non-domestic-benefits-realisation-Govt-Response.pdf

- 5. AMR and SMETS meters measure consumption every half hour and transmit readings to the supplier without customers needing to carry out manual meter readings. SMETS meters must meet a range of enhanced functional, interface and data requirements (of relevance to this consultation, they can connect to Consumer Access Devices (CADs)¹³ and the Data Communications Company¹⁴ via the Wireless Area Network/Home Area Network).¹⁵
- 6. The rollout of smart meters to non-domestic sites within the mandate is estimated to lead to £1.5 billion of energy savings over the appraisal period¹⁶, driven by consumers engaging with the energy consumption data recorded by their smart meter. For example, using this data to identify ways to save energy and costs (such as by changing the amount or time that their business uses electricity/gas, or by upgrading to more energy efficient equipment and processes).
- 7. Unlike for domestic households (where energy suppliers are obligated to provide smart meter customers with an In-Home Display (IHD) of their near real-time energy use), suppliers are not at present obligated to provide non-domestic customers with a default way of accessing or engaging with their energy consumption data.
- 8. While evidence shows that energy feedback via an IHD is effective in delivering savings for households¹⁷, the diversity of sites covered by the non-domestic mandate has long pointed to non-domestic consumers requiring a more bespoke approach.¹⁸
- 9. For that reason, licence conditions were left flexible. At present, energy suppliers are only obligated to provide non-domestic SMETS and AMR customers with access to their consumption data (at least half-hourly for electricity and hourly for gas) upon request and in a timely manner. However, suppliers can charge for data access, it can be provided in any format and there is no specificity with regards to 'timeliness'.
- 10. The Government's ambition has always been that energy suppliers would go further than these minimum requirements, leveraging the smart metering infrastructure to drive market-led innovation and deliver energy saving benefits to non-domestic smart meter customers.

Existing research and evidence

11. Some consumers do not need additional support to engage with, and benefit from, their smart meter data. BEIS 2017 case study research¹⁹ reaffirmed earlier studies that there are some sites across sectors (particularly customer-facing chains) that use smart meter

¹³ https://smartenergycodecompany.co.uk/glossary/consumer-access-device/

¹⁴ https://www.smartdcc.co.uk/

¹⁵ https://www.beama.org.uk/asset/32BD967E-9475-4362-83B553251A84C1F4/

¹⁶ 2019-2034, see: https://www.gov.uk/government/publications/smart-meter-roll-out-cost-benefit-analysis-2019

¹⁷ https://www.gov.uk/government/publications/smart-meter-roll-out-cost-benefit-analysis-2019

¹⁸ https://www.gov.uk/government/consultations/smart-meter-data-access-and-privacy

¹⁹ https://www.gov.uk/government/publications/smart-metering-in-non-domestic-premises-early-research-findings

- data to inform their energy efficiency strategies, to identify and respond to unexpected usage and support incentives and targets.
- 12. However, the research also showed that some smaller non-domestic sites face additional barriers to engaging with their smart meter data primarily limited time and resource to proactively analyse raw consumption data and monitor it on an ongoing basis. The research pointed to the value of further innovation in this area developing easy, accessible and appropriate products and services that provide smaller sites with tailored insights on their energy consumption without placing substantial demands on their time.
- 13. Following this, BEIS analysis found that the existing market for smart meter data tools and services was primarily serving larger non-domestic organisations (likely those with an energy management strategy and higher capacity for savings). It concluded that there was a market failure, in terms of both third party and energy utility market offerings, for products and services based on data analytics to provide such actionable information to smaller non-domestic sites.²⁰
- 14. Therefore, between 2018 and 2020 BEIS commissioned the Non-Domestic Smart Energy Management Innovation Competition (NDSEMIC) to start to address this market failure. NDSEMIC funded the development and piloting of seven data-driven tools (ranging from apps to online services and activities for school pupils) that use smart meter data to help smaller sites (specifically in the retail, hospitality and school sectors) reduce their energy use.
- 15. NDSEMIC sought to test the hypothesis that further innovation in this space can engage consumers and help smaller sites to better manage their energy use, and to learn more about what types of data-driven tools are effective. It also sought to understand what might be needed to support the market to drive forward innovation in this space. A series of workshops and events were run alongside the research with industry stakeholders, ranging from energy suppliers to technology experts and small business trade bodies.
- 16. The NDSEMIC evaluation was published in November 2020.²¹ This showed that with the right features²², consumer support and timely insights, smart meter data innovations can engage smaller non-domestic consumers and help them maximise the benefits of smart metering. In some cases, savings were substantial. Energy savings of 10-20% were observed in some schools and some small businesses achieved savings of up to 11%.
- 17. However, the evaluation also identified that future development of the market for non-domestic smart energy management tools and services will depend upon:

²⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664441/Non_Domestic SEMIC Invitation To Tender.pdf

²¹ https://www.gov.uk/government/publications/non-domestic-smart-energy-management-innovation-competition-ndsemic-evaluation-findings

²² Such as novel energy efficiency insights and data presented in easy to understand, relevant formats.

- a) The extent to which energy suppliers drive forward innovation in this space and offer tools which leverage the motivations of early adopters.²³
- b) The extent to which the processes and formats through which consumption data are made available are conducive to the development of meaningful, engaging, data-driven services.
- 18. Findings from the evaluation also showed that despite acting with consumer consent, NDSEMIC innovators struggled to access the energy consumption data they needed to test their innovations. In cases where NDSEMIC innovators did not partner with an energy supplier, data access costs and processes applied by suppliers ranged across industry, with data requests sometimes taking several months to be granted.²⁴

How the supply market is operating

- 19. BEIS has also monitored industry developments to understand market progress since the start of NDSEMIC. Overall, whilst suppliers are making some progress in both their data and energy efficiency advice offerings to non-domestic smart meter customers, this progress is generally slower than needed to deliver benefits for these consumers at pace; and the types of tools on offer remain basic without the functionalities that NDSEMIC found to be most effective at driving savings. For example:
 - a) Many suppliers continue to only offer data on request, despite smaller sites being unlikely to proactively initiate data requests.
 - b) Many suppliers continue to offer consumption data as a raw CSV file only, despite BEIS evidence that smaller sites find raw data hard to engage with and unlikely to proactively drive data analysis.²⁵
 - c) Very few supplier offerings display live energy data²⁶, which NDSEMIC showed enables a small business to act quickly and effectively upon alerts and prompts.
 - d) Many suppliers continue to offer basic online portals and platforms that visualise consumption data, without the built-in functionalities and features that the NDSEMIC evaluation found to be effective at driving consumer engagement. For example, tailored energy efficiency insights, or support for consumers to help them act on such insights.²⁷

²³ Motivations for taking part in the NDSEMIC Competition were financial, operational and/or environmental.

²⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933628/insigh_ts-for-innovators.pdf

²⁵ https://www.gov.uk/government/publications/smart-metering-in-non-domestic-premises-early-research-findings

²⁶ I.e. they do not present consumers' energy consumption 'as it happens' in near real-time.

²⁷ Solutions that offer (or are partnered with solutions that offer) support for consumers alongside raw technologies were found to be effective during NDSEMIC, particularly for more complex energy efficiency measures such as equipment upgrades.

20. Evidence also suggests that the existing non-domestic smart meter offer can be confusing to consumers. A 2017 Citizens Advice study²⁸ found that some microbusinesses perceived they would receive 'more' with the smart meter than was the case, for example an IHD or a tool for seeing insights into their energy consumption, similar to the domestic offering. Therefore, there is a risk that limited supply market offerings are actively deterring non-domestic smart meter "seekers" as well as doing little to engage more passive consumers.

Conclusions & Government Vision

- 21. Government remains of the view that a one-size-fits-all data tool will not be effective in supporting all non-domestic smart meter customers to realise savings. The NDSEMIC evaluation reaffirmed this position and the value of tailored and diverse tools and services. However, it is also the case that collectively, our evidence base suggests that the market is not currently maximising benefits for these consumers and supplier offerings are not progressing at the pace needed to deliver the expected benefits.
- 22. Government believes that the current requirements must be enhanced to ensure that all energy suppliers meet a baseline data offer for non-domestic smart meter customers that can be clearly explained and communicated. This must also ensure that third parties (when acting with consumer consent) have the ability to enter this market and develop new offerings that compete with those of energy suppliers.
- 23. However, we acknowledge that overly prescriptive regulation may stifle innovation. Government retains the principle that non-domestic licence obligations should remain technology neutral and we do not wish to mandate any one particular data tool, format or service in the non-domestic market. Instead, we seek a diverse and flourishing market which maximises the smart metering infrastructure to deliver benefits for businesses.
- 24. Therefore, our proposals are intended to act as a legislative floor or baseline that supplier data offerings cannot fall below, rather than indicating a ceiling or best practice approach. This leaves flexibility for suppliers to innovate above and beyond the baseline. We believe that this strikes a reasonable balance between consumer and industry interests, and welcome further stakeholder views on this.
- 25. We also acknowledge that driving innovation in this space is complex and consumer demand for innovative products and services will be an important dependency for future market development. Smaller businesses have many competing priorities, and engaging them with new innovations, particularly with regards to energy management, can be a challenge.

²⁸ https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/smart-choices-investigating-microbusinesses-interest-in-and-understanding-of-smart-meters1/

- 26. The COVID-19 pandemic has also proved very difficult for businesses and the energy supply industry more widely- both in terms of business closures and energy suppliers seeing cashflow impacts and increasing bad debt.²⁹ However, it is also this very context that increases the importance of businesses having access to accurate and timely insights regarding their energy consumption, to help manage costs, avoid debt and support business recovery.
- 27. In addition, Government's view is that demand for these innovations should not be assumed to be static particularly as business attitudes change and societal momentum towards net zero grows. NDSEMIC has shown that with the right features and customer support, Small and Medium-Sized enterprises (SMEs) can be engaged with these solutions. Monitoring data from larger energy suppliers provided to BEIS shows that take up of smart energy management tools (where they do exist) varies across the market and reinforces the assumption that more engaging propositions have higher take up.
- 28. Therefore, we are of the view that more active non-domestic consumer engagement with energy data feedback services is possible, but Government and industry will need to work together, and energy suppliers have a key role to play. In particular, the NDSEMIC evaluation highlighted that energy suppliers' engagement in this area (including the rollout of new products to customers at scale and potentially for no additional charge) appear to be significant factors in the future development of a sustainable market.³⁰
- 29. Equally, the IHD policy for domestic smart meter customers has shown that a minimum supplier offer can drive household engagement with energy data and energy management.³¹ Therefore, by establishing a baseline data offer for non-domestic smart meter customers that suppliers cannot 'fall below', we expect this to spur engagement with energy feedback and unlock future demand for smart energy management products and services and more enhanced functionalities.
- 30. Finally, as industry and Government collaborate to achieve net zero, more open data systems will be key to ensuring that businesses can play their role, both in terms of the visibility they will need of their own energy consumption to change their behaviour, and in terms of their rights to share their data with third parties who will deliver services to them to help them identify ways to manage their energy use and reduce their carbon footprint in an economical way.
- 31. For example, Smart Data schemes will support the secure and consented sharing of wider customer data with authorised third party providers that can support domestic and

²⁹ https://www.baringa.com/BaringaWebsite/media/BaringaMedia/Campaign%20images/Covid-19-The-economic-impact-on-energy-and-utilities.pdf

³⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933831/18-007974-01-NDSEMIC-overall-evaluation-impact-report.pdf

³¹ https://www.gov.uk/government/publications/smart-meters-progress-on-realising-benefits-for-consumers

non-domestic consumers to save time, money and effort in finding and choosing better suited deals.³²

- 32. Open data systems will also help facilitate the innovation of products and services that will deliver a smarter and more flexible grid enabled by market-wide half-hourly settlement (MHHS). The MHHS reforms will result in suppliers being settled for their customers' electricity consumption on a half-hourly basis, which will in turn incentivise them to help their customers shift their consumption to times when electricity is cheaper to generate or transport. All
- 33. Overall, we recognise that Government has a role to play in supporting industry to drive forward momentum in the market for non-domestic smart energy management services, and we welcome views on how this can best be achieved. We previously invited views on the non-domestic smart meter data offer as part of a 2019 consultation on the role of Smart Energy GB in relation to microbusinesses.³⁵ At that point, we indicated our intention to return to the issue in future.
- 34. This consultation therefore sets out Government proposals to drive forward non-domestic smart metering data innovation and deliver benefits for consumers now that the findings of NDSEMIC are published. We have established three objectives for Government in driving this ambition, around which subsequent sections are structured:
 - a) Ensuring a baseline level of 'consistency' in the non-domestic smart meter consumer data offer.
 - b) Streamlining the smart meter data access process for a non-domestic consumer's nominated third party.
 - c) Creating a policy context that facilitates non-domestic smart metering innovation, including support for industry bodies to drive this (such as suppliers and third parties).

domestic-benefits

^{32 &}lt;a href="https://www.gov.uk/government/consultations/smart-data-putting-consumers-in-control-of-their-data-and-enabling-innovation">https://www.gov.uk/government/consultations/smart-data-putting-consumers-in-control-of-their-data-and-enabling-innovation

³³ Electricity suppliers are required to buy enough energy from generators to meet their consumers' needs in each half-hour period, and 'settlement' is the process for determining whether what they bought matched what their customers used. Most domestic and smaller non-domestic consumers are currently settled based on estimates of how much they have used in each half-hour period. However the rollout of smart meters, which can record the amount of energy consumed within every half-hour period, means information about customers' actual consumption of electricity on a half-hourly basis can be used in settlement.

³⁴ Details of the MHHS project can be found on the Ofgem website here: https://www.gov.uk/government/consultations/smart-metering-implementation-programme-realising-non-

Section 1: Ensuring a baseline level of 'consistency' in the non-domestic smart meter offer

A baseline offer for consumers

- 35. The NDSEMIC evaluation has reconfirmed that access to raw smart meter data alone is unlikely to be sufficient to drive savings for those consumers at smaller non-domestic sites with limited time to proactively engage with it. The data formats and tools piloted which proved effective for engaging smaller non-domestic sites and prompting action were those which provided actionable feedback to SMEs based on live, half-hourly (or more granular) data and which had built-in, simple energy efficiency insights (with a package of support to help SMEs 'act' on such insights).³⁶
- 36. Current licence conditions require that non-domestic smart meter customers are entitled to timely access to their consumption data upon request. Licences are silent on the format through which that data must be provided and whether it must be offered by default by the supplier alongside the meter (i.e. upon installation or immediately following) or whether the consumer has to proactively request such data access themselves. "Timely access" is also not defined, and suppliers can charge a consumer or their nominated representatives for access to their energy consumption data.
- 37. Existing licences have historically been less prescriptive to enable innovation. However, as outlined in Paragraph 19, supplier-led innovation remains slow and there remains a large gap between what our evidence base says is effective for engaging consumers and what suppliers are currently offering under existing licence conditions.
- 38. Therefore, a balance needs to be reached to ensure that consumers can access their smart meter data in meaningful and engaging ways (to ensure that consumer benefits from the smart meter rollout are maximised), whilst ensuring that energy suppliers retain flexibility to innovate and meet the diverse needs of their customer base. Government is therefore consulting on the following amendments to policy regarding non-domestic smart meter customer access to their consumption data:

³⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933831/18-007974-01-NDSEMIC-overall-evaluation-impact-report.pdf

Box 1- proposed policy changes

Non-domestic smart meter (AMR/SMETS) customers must be entitled to a minimum baseline of free access to information based on their energy consumption data, presented (for example visualised) to them in a user-accessible format to allow insights into their energy consumption and usage.

- 39. These proposals are intended to take a user-centric approach, emphasising the importance of data insight (as opposed to raw data files) and requiring the outcome rather than the means. This ensures that suppliers retain the flexibility to develop apps, online platforms, data-driven services or perhaps even alternatives to technology-based products (such as providing data insights via email or customer 'support') that meet the diverse needs of their non-domestic customer base, both in terms of energy consumption reduction and load shift. Supporting consumers' ability to unlock their flexibility and shift their consumption to different times of the day is particularly important as industry transitions to market-wide half-hourly settlement (MHHS).³⁷ Precedent for similar user-centric language already exists in licence conditions.³⁸
- 40. Importantly, the proposals also enhance non-domestic consumer rights regarding their smart meter data. NDSEMIC showed that over half of pilot sites would be willing to pay a low amount for a smart energy management tool or service, but this may not be universal, particularly for less engaged customers at smaller sites. Requiring suppliers to provide a baseline free version of consumption data will enhance consumers' rights to access information on their own energy consumption. This aligns with the Government's plans for Smart Data schemes as outlined in Paragraph 31.

³⁷ <u>https://www.ofgem.gov.uk/publications-and-updates/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case</u>

³⁸ See SLC 31F.11 "The licensee must prepare a Tariff Information Label for each of their Operational Tariffs which consists of a clear and comprehensible list of key features of that Tariff, in a table or other user friendly and consolidated format" and SLC 51.4 "(b) as soon as is reasonably practicable after receiving any request to do so from the Domestic Customer at those premises, make available (free of charge and in a readily understandable format) Relevant Consumption Data".

Consultation Questions

- 1. Do you agree with the rationale and evidence underpinning our proposals to improve the smart meter data offer for non-domestic consumers? Please give reasons and evidence to support your answer.
- 2. Overall, do you agree that these proposals achieve the right balance between consumer needs and supporting market-led innovation in non-domestic smart energy management tools and services? Please give reasons and evidence to support your answer.
- 3. Do you agree with the rationale and evidence underpinning our proposals outlined in Box 1 (that non-domestic smart meter customers must be entitled to a minimum baseline of free access to information based on their energy consumption data, presented to them in a user-accessible format to allow insights into their energy consumption and usage)? Please give reasons and evidence to support your answer.

Default provision to smart meter customers (rather than upon individual customer request)

41. A key driver of benefits to consumers is whether such information and insights based on energy consumption are provided to all non-domestic smart meter customers by default (i.e. 'given' to consumers without them asking for it), or only in response to individual customer requests. We also recognise that it will be important to set meaningful boundaries around the timeliness of data provision to ensure that data feedback is useful to the consumer, and deliverable from an operational perspective. Government proposals are outlined in Box 2.

Box 2 – proposed policy changes regarding data insights provided by default to all non-domestic smart meter customers

Data provision (which meets the criteria in Box 1) must be provided by default by the energy supplier to the non-domestic customer as part of the standard smart meter offer without the customer having to request it (i.e. beginning at the point of installation or shortly thereafter for new smart meter installations and from the point at which the policy comes into effect for existing smart meter customers).

From that point, data-driven information must be provided on a regular, ongoing basis in a form and frequency sufficient to enable that non-domestic customer to:

- a) Understand and gain insights into consumption patterns and trends over time.
- b) Make informed choices in when, and how much, energy that non-domestic customer consumes, enabling them to consider ways to be more efficient and/or flexible in how and when they consume energy.

Electricity consumption data (on which the above is based) should be recorded at half-hourly (or more granular) intervals and gas consumption data at hourly (or more granular) intervals (subject to the relevant data privacy considerations for microbusinesses).

Consumption data should refer to at least 12 months of historic data, up to the date information is made available OR should cover the period since a) the customer joined the energy supplier, b) the customer became the customer at the relevant premises or c) when the smart meter was installed.

- 42. At present, licences only require that suppliers respond to data access requests in a timely manner and therefore many supplier offerings remain "upon consumer request" only, often provided as a raw CSV file attachment.
- 43. However, our analysis suggests that the number of requests that suppliers receive from non-domestic consumers within the smart meter mandate for access to their energy consumption data is low. This is not surprising given the evidence that smaller businesses are unlikely to proactively drive monitoring of their own smart meter data and that they require additional support.
- 44. We have also set out in Paragraph 19 why we believe that the gap between what the supply market is offering by way of data provision and what evidence suggests is effective for engaging consumers remains wide, reinforcing the challenge that many consumers are unlikely to engage with what is currently available.
- 45. Overall, this picture suggests that data feedback provided by default (i.e. without the consumer having to request it) is required for harder to engage non-domestic consumer

sites to realise energy savings, and therefore this should be provided as part of the standard smart meter offer and on an ongoing basis. In practice this might mean that whatever format the supplier chooses to provide ongoing and regular data feedback in (for example an app, online platform or via regular emails), it is given (alongside any relevant log in details or registration instructions) by default to the customer without them having to ask for it.

Ensuring implementation timeframes are sufficient to enable innovation

- 46. We recognise that default data provision may be a step change for those suppliers (particularly smaller ones) that currently offer little/no data provision to their non-domestic customers (and therefore may not have the relevant arrangements in place to provide data insights on an ongoing basis). We also see value in giving suppliers longer notice of policy changes so that they can build plans for their data feedback offer into their strategies, focus on designing or adapting propositions that will be effective at engaging consumers and spread out any costs accordingly.
- 47. Therefore, we are proposing that our policy changes would not come into effect until July 2022. We welcome stakeholder views on the suitability of this timeframe for both industry and consumers.
- 48. Our proposed policy changes are also deliberately flexible with regards to the format and means through which suppliers can provide insights into consumption to their smart meter customers. A supplier may decide that there are cost-effective ways to make propositions engaging in the shorter-term that do not rely on them building new systems or technologies- for example through emails or billing mechanisms- that still meet the requirements- whilst investing in longer-term solutions.
- 49. On the basis that we would delay policy implementation in order for suppliers to plan ahead, combined with the flexibility of the proposals to enable suppliers to find cost-effective solutions that may not require building entirely new systems, we do not propose any supplier exemptions to the policy including for smaller energy suppliers. We welcome stakeholder views on this point.

Compatibility with market-leading approaches

50. The Government's primary objective is to ensure that the market can facilitate energy savings for a diverse range of non-domestic smart meter consumers. Overall, our priority is to ensure that consumers are entitled to a baseline free version of their energy consumption data. However, it is equally important that they engage with their consumption data and use it to change their behaviour, and that suppliers have the flexibility to deliver services which can realise that behaviour change.

- 51. Our proposals have been designed to establish a floor, or "baseline", that supplier data offers cannot fall below, rather than them legislating for a best practice or market-leading data offer. Therefore, it is compatible for an energy supplier to offer both a "free baseline offer", and chargeable value-add products or functionalities in addition, thereby protecting suppliers' flexibility to innovate and develop compelling commercial solutions in this space. Some examples of 'market leading' functionalities which go beyond the baseline proposed (based upon NDSEMIC findings) include real-time data, tailored energy efficiency advice, wider support services for SMEs and partnerships with other products or services.
- 52. BEIS' monitoring of the energy supply market suggests that some suppliers already offer free data provision and more advanced paid-for services in parallel. This is also the principle of the domestic market- the requirement to offer consumers an In-Home Display does not prevent suppliers from developing additional, value-added smart energy services.
- 53. In addition, our ambition is that the existence of a free baseline will act as an enabler of future development and innovation in the non-domestic smart energy services market. Innovation literature discusses the ways in which "Freemium" (or free software offered as a precursor to premium functionalities within the same tool or service) can drive demand for paid-for features over time.³⁹ Our proposals as designed would not prevent suppliers from taking this commercial approach if it aligned with their innovation strategies.
- 54. Therefore, our ambition is that our proposals could be levered by industry to create consumer demand that would not have occurred without a free baseline data offer. For example, SME consumers that would not have proactively sought out a data offer will benefit from receiving insights into their consumption on an ongoing basis, which over time will drive more proactive energy efficiency behaviours and demands for new functionalities and services. This principle is also supported by the NDSEMIC evaluation which found that not all participants had pre-existing environmental or cost motivations some took part in the pilots (both free and incentivised) as they had 'nothing to lose', but nevertheless engaged with the tools and services.
- 55. Overall, we propose that the overall benefits of our proposals to longer term innovation and market development outweigh any risks, and that a free baseline is both compatible with market-leading approaches and complementary. We welcome stakeholder views on this.

³⁹ Jiang, Z., & Sarkar, S. (2009). Speed matters: The role of free software offer in software diffusion. Journal of Management Information Systems, 26(3), 207–240-

https://www.researchgate.net/profile/Zhengrui Jiang/publication/220591125 Speed Matters The Role of Free Software Offer in Software Diffusion/links/59776e45a6fdcc30bdbad4e7/Speed-Matters-The-Role-of-Free-Software-Offer-in-Software-Diffusion.pdf and Kumar, V. (2014). Making" freemium" work. Harvard Business Review, 92(5), 27–29- https://hbr.org/2014/05/making-freemium-work.

Timeliness of data provision

- 56. Whilst we recognise that live data may not be possible under all circumstances (for example, this may be more challenging for some AMR data feeds) we are proposing that data-driven information presented to consumers should be provided on an ongoing, regular basis, sufficient to enable the customer to make informed choices about their energy consumption and understand their consumption patterns and trends over time.
- 57. Whilst, based on evidence, we would encourage data and insights provided in 'near real time' wherever possible, by not specifying this in legislation we propose that this leaves some flexibility for suppliers to use data frequency as a functionality to distinguish value-added services from their free baseline offer if they choose, providing that the free baseline meets the legislative criteria.
- 58. We are also taking the opportunity to propose further refinements regarding data granularity. At present, licences require suppliers to provide timely access to half-hourly electricity consumption data and hourly for gas upon consumer request. NDSEMIC showed that data presented in half-hourly or more granular intervals was a key driver of consumer engagement. In addition, whilst some AMR gas meters will only be programmed to record at hourly intervals, SMETS gas meters can record at half-hourly. Therefore, we are proposing to clarify that licences refer to half-hourly/hourly electricity/gas consumption data **or more granular** to encourage greater granularity where possible.
- 59. Under the smart metering Data Access Privacy Framework (DAPF)⁴⁰, suppliers can access microbusinesses half-hourly consumption data in order to provide them with data-driven services, providing the consumer has not opted out of the supplier accessing this level of granularity for these purposes. In addition, we appreciate suppliers will have their own frameworks in place to implement the General Data Protection Regulation (GDPR). Therefore, we acknowledge that there may be instances where the supplier does not have the relevant permissions to place a microbusiness customer on a half-hourly data access schedule in order to meet our policy requirements and may have to default to a period greater than half-hourly (up to monthly) depending on what they are processing in order to meet data privacy obligations.
- 60. However, we anticipate that microbusiness consumers will be incentivised to enable half-hourly data access in order to receive regular, free consumption information, especially if the benefits are clearly explained to them and they are given information on how to enable this (see Box 3). In fact, our data suggests that the number of microbusiness consumers currently opting out of a half-hourly data access schedule is low. Therefore, we expect the number of microbusinesses receiving consumption information based on less frequent data granularities (than half-hourly for electricity and hourly for gas) to be low. We will continue to review this aspect of the policy to ensure that it is being

⁴⁰ https://www.gov.uk/government/consultations/smart-meter-data-access-and-privacy

- implemented as intended. We welcome stakeholder views on this, particularly the legal drafting in Annexes A and B.
- 61. We also propose that consumption data (upon which requirements are based) refers to at least 12 months of historic consumption data. We propose this is a reasonable and useful period given that non-domestic energy consumption patterns are often seasonal, and this provides one 'annual' dataset to analyse variation. Whilst SMETS meters hold 13 months of data and would be able to meet this requirement, we are interested in the extent to which AMR meters can do the same (see Paragraph 69). We also recognise that suppliers may not be able to provide 12 months of historic data where a customer has changed energy supplier, is a new customer or their smart meter was installed more recently.

Consultation Questions

- 4. Do you agree with our evidence that data provision (which meets the criteria in Box 1) should be provided by default by the supplier as part of the standard smart meter offer without the customer having to request it in order to drive customer engagement? Please give reasons and evidence to support your answer.
- 5. Do you agree that the proposed implementation timeframes are sufficient to enable all suppliers to meet the free baseline offer? Please give reasons and evidence to support your answer.
- 6. Do you agree that a free baseline data offer is compatible with market-leading functionalities and services? Please give reasons and evidence to support your answer.
- 7. Do you agree with the proposals around timeliness of data provision, as set out in Box 2? Please give reasons and evidence to support your answer.

Driving awareness of the non-domestic smart meter consumer offer

- 62. At present, there are no requirements upon energy suppliers to make non-domestic consumers aware of the ways they can gain access to the consumption data recorded by their smart meter, or of the benefits of doing so.
- 63. However, it is the Government's view that the proposed licence changes in this consultation will be less effective if non-domestic consumers are not regularly made aware of their rights.

64. Therefore, we are inviting stakeholder views on the proposals in Box 3- that suppliers should regularly (at least every six months) inform customers of their available means for accessing their free consumption data/information, of the benefits of accessing it and how to receive consumption information based on half-hourly/hourly data where this is not yet enabled (see paragraph 60). This may be particularly important in situations where suppliers provide a free baseline data tool or service that requires the user to 'log in', as regular reminders may be needed to prompt engagement.

Box 3- proposed policy changes with regards to awareness

Suppliers should regularly (at least every six months) inform non-domestic smart meter customers of their available means for accessing a free version of their energy consumption data/information, of the benefits of accessing it and, where the microbusiness customer is not currently receiving free consumption information at half-hourly/hourly granularity due to previous data privacy arrangements but now wants to, the steps they can take for this to be enabled. This should be irrespective of any decision the customer has made to take up a commercial offer.

- 65. Historically, non-domestic consumers (particularly microbusinesses) have shown lower levels of awareness of their eligibility for smart metering and the possible benefits.⁴¹ Therefore, in 2019 Government amended licence conditions to extend Smart Energy GB's⁴² remit to include microbusinesses. Since then, Smart Energy GB has tailored a range of activities to raise microbusiness awareness of smart metering.
- 66. In 2020, Government confirmed our intention to amend Smart Energy GB's objectives to ensure they remain relevant for the next phase of the smart meter rollout post-2020. ⁴³ This included an objective to continue raising awareness amongst microbusiness consumers in a way that recognises the value of smart meter data to a range of diverse businesses.
- 67. Our intention to improve the minimum data offer, together with Smart Energy GB's role in promoting the value of smart meter data, will be mutually supportive. Together, they will help play a key role in driving non-domestic awareness of smart metering and in generating consumer demand for smart meter data and data-driven services.

43 https://www.gov.uk/government/consultations/smart-meter-coordinated-consumer-engagement

⁴¹ https://www.gov.uk/government/consultations/smart-metering-implementation-programme-realising-non-domestic-benefits

⁴² The programme of national engagement to raise awareness of smart meters, drive behaviour change and help consumers benefit from smart metering has so far been led by the not-for-profit organisation, Smart Energy GB.

Consultation Question

8. Do you agree with the rationale and evidence supporting our proposals for suppliers to regularly inform consumers of their available means for accessing a free version of their energy consumption data? Please give reasons and evidence to support your answer.

Market factors and timeliness of data provision

- 68. We are aware of some market considerations which may affect our proposed requirements in relation to timeliness of data provision.
- 69. One is in relation to the **amount of data that the meter physically holds**. It is our understanding that whilst SMETS meters hold 13 months of consumption data, some advanced meters in the market may not. We are interested to seek stakeholders' views (and any evidence they can provide) on the amount of historic data that is likely to be available to suppliers from which to develop their data offers for AMR customers and any possible implications for our proposed policy changes.
- 70. Secondly, we are interested to understand how supplier access to data flows might impact our proposals. Firstly, we are aware that some non-domestic advanced meter customers, primarily those with half-hourly settled meters, may have appointed and contracted with a Data Aggregator/Data Collector (DC/DA) and Meter Operator (MOP) other than the agent(s) used by their energy supplier. 44 In this situation their metering services (and any smart meter data services they receive) may be independent of their energy supplier. Secondly, where a non-domestic customer has a SMETS1 meter not yet enrolled in the Data Communications Company (DCC)45, consumption data may flow via a Smart Metering System Operator (SMSO) that the supplier does not have a relationship with.
- 71. We are particularly interested to understand what visibility the energy supplier would have of customers' half-hourly/hourly consumption data in these scenarios, in order to meet the proposed requirements in this consultation. Whilst we are aware that the number of SMETS1 meters operating in the non-domestic sector is low, we are particularly interested to understand the frequency with which customers are likely to use alternative metering agents, particularly smaller consumers who do not have half-hourly settled meters within their portfolios.

⁴⁴ A DC/DA is an agent nominated to collate and aggregate consumption data from advanced meters for billing purposes. Some DCDAs use such data to offer value-add services back to the consumer.

⁴⁵ https://www.smartdcc.co.uk/

- 72. The Government's initial view is that the use of alternative metering agents should not pose a significant issue for our proposed policy changes for the following reasons:
 - a) Under existing licence conditions, suppliers are still obliged to provide timely access to half-hourly/hourly gas consumption data on request by the consumer, even in situations where the same consumer has appointed alternative metering agents for their advanced meter.
 - b) In addition, given broader shifts towards smarter systems, we believe it is a reasonable assumption that energy suppliers will have increasing visibility of their non-domestic customers' half-hourly/hourly consumption data (subject to relevant data privacy considerations for microbusinesses) in order to provide a baseline smart meter data offer.
 - c) Finally, we believe it is compatible for a supplier's baseline smart meter data offer to coexist with any other third party services the consumer may have procured elsewhere, for the reasons set out in this consultation. Firstly, because a free supplier baseline may generate consumer demand for (or exist on the market in parallel to) additional paid-for services (including from third parties) or the supplier could choose to meet their obligations to provide a free baseline via third party providers. We welcome stakeholders' views on this point.
- 73. Third, a further dependency may be the extent to which energy suppliers currently place their non-domestic customers on half-hourly data access schedules (subject to data privacy requirements). We invite stakeholder views on this, including what factors drive supplier approaches in this space.
- 74. A further factor which could influence our policy is the extent to which **meters are** capable of half-hourly reads and can be remotely configured to do so. It is our understanding that some 'smart type' or 'remote access' meters exist in the market without these capabilities, but that they are likely to be low in number and declining. We are proposing that our licence changes would only apply to meters which meet the definition of an advanced or SMETS meters- thus 'smart type' meters without such capabilities would be excluded. We invite stakeholder views on this point.

Consultation Questions

9. Do you have any views on whether and how the market factors identified (meter storage, the role of DCDAs/SMSOs, half-hourly data schedules and 'smart type' meters) might affect the proposals outlined? Please give reasons and evidence to support your answer.

⁴⁶ https://www.ofgem.gov.uk/sites/default/files/docs/2015/02/data privacy extension - decision 1.pdf

Section 2: Streamlining the smart meter data access process for a non-domestic consumer's nominated third party

A baseline offer for nominated third parties

- 75. At present, energy supply licence conditions state that a non-domestic consumer (or that consumer's nominated third party i.e. a third party acting with the consumer's consent) is entitled to timely access to that consumer's half-hourly/hourly consumption data upon request to the supplier.
- 76. During the NDSEMIC Competition, innovators sought access to consumption data under these conditions. However, they experienced a number of barriers. These included time-lagged responses to data requests (sometimes over a matter of months), varied data charges across different suppliers and inconsistent consent processes.⁴⁷ These processes at times also proved disengaging for the consumers taking part.
- 77. Therefore, the NDSEMIC evaluation suggests that a dependency to future market development is the extent to which energy suppliers are incentivised, or obliged, to make consumption data readily available to their non-domestic customers, or third parties acting with customer consent. These findings are also supported by the Energy Savings Opportunity Scheme (ESOS) evaluation⁴⁸, which showed that ESOS assessors faced additional challenges in accessing participants' consumption data to support energy audits.
- 78. Our view is that existing regulations within licences regarding requests for energy consumption data by non-domestic customers and their nominated third parties need to be strengthened. This will ensure that consumers can access the types of third party services that can help them realise the benefits of their smart meter.
- 79. In doing so, we are proposing to "split out" the default and ongoing consumer data offer from licence conditions regarding requests for data files from consumers and their nominated third parties, to ensure that language is sufficiently tailored to each. Our proposed policy changes are set out in Box 4 below:

⁴⁷ https://www.gov.uk/government/publications/non-domestic-smart-energy-management-innovation-competition-ndsemic-evaluation-findings

⁴⁸ https://www.gov.uk/government/publications/energy-audits-and-reporting-research-including-the-energy-savings-opportunity-scheme

Box 4: proposed policy changes regarding third party access to non-domestic smart meter customers' consumption data

Consumers and their nominated third parties (i.e. those acting with consumer consent) must be entitled to a minimum baseline of free access to that consumer's (half-hourly/hourly or more granular) energy (electricity/gas) consumption data in a machine-readable format via the internet.

Processes by which nominated third parties can seek access to energy consumption data and evidence to the energy supplier that they have consumer consent must be clear, transparent and publicly available. Suppliers must respond to data access requests within ten working days, either granting data access (where all legal requirements are met- for example data protection and cyber security) or clearly explaining why access cannot be granted and what further steps the nominated third party may wish to take.

Data provided on request by the third party should include at least 12 months of historic data, up to the date of the data request OR should cover the period since a) the customer joined the energy supplier, b) the customer became the customer at the relevant premises, c) the smart meter was installed or d) the last data access request was granted, where 12 months of data is not needed by the third party.

Principles & links to cross-government initiatives

80. The key principles underpinning these changes are as follows:

- a) Strengthening the consumer's portability rights such that a free version of their consumption data can be accessed by their nominated third party with their consent. This is particularly relevant where the consumer may want to participate in an innovation trial or wants a third party to assess their historic consumption data to inform a broader service being provided to them.
- b) The NDSEMIC evaluation also showed that often, the tools/services which were effective at engaging consumers and delivering substantial consumption reductions were those with 'additional support services' for the SME consumeri.e. where they provide additional support alongside raw technology. Therefore, free access to this consumption data may facilitate this kind of value-add innovation activity which can deliver significant consumer benefits.

- c) Ensuring that third parties are entitled to consumption data in a machine-readable format via the internet. Machine-readable is a term used in statistics and data management, meaning data that can be read by a computer / piece of software, because it is in a widely used / open access format, and is in a structured format (e.g. consistent headings).⁴⁹ This recognises that "user-accessible" data would not be applicable for third parties, and that raw data files, whilst not engaging for most non-domestic consumers, may be helpful to third parties wishing to carry out data analysis to support a service or to consumers wishing to pass on their own data to a third party.
- d) Establishing that **processes for obtaining consumer consent** (for example, letters of authority) must be clear, transparent and publicly available. This would help to address some of the inconsistencies, observed during NDSEMIC, which make it difficult for a consumer to nominate a third party to access their consumption data efficiently, proving a barrier to third party innovation.
- e) Proposals for access to at least 12 months of historic data are the same as for the consumer proposals for the reasons outlined. However, we welcome views on the applicability of this time period for third parties.
- f) As discussed throughout this consultation, these principles align with wider Government initiatives to modernise energy data to support net zero and establish Smart Data frameworks. 50 For example, they align with recommendations from the Energy Data Taskforce to commercially digitalise the energy sector and evolve its culture to embed the values of 'presumed open', i.e. making data publicly shareable as much as possible, while protecting commercially or personally sensitive data. 51

Relationship with DCC services

81. Given the role of DCC proxy/Managed Service Provider services in driving forward third party non-domestic smart metering innovation in the future, it may be queried why we are proposing amendments to non-domestic licence conditions. For example, DCC services have been designed such that third parties can access half-hourly SMETS data (subject to requirements under the Smart Energy Code) by either becoming a DCC Other User, or by using the services of DCC Other Users, who may provide access to consumption data in exchange for a fee.

⁴⁹ The Open Data Handbook states that 'machine readable' data is: 'Data in a data format that can be automatically read and processed by a computer'. Furthermore, Regulation 2 of the Re-use of Public Sector Information Regulations 2015 defines machine-readable format as: 'A file format structured so that software applications can easily identify, recognise and extract specific data, including individual statements of fact, and their internal structure'.

⁵⁰ https://www.gov.uk/government/consultations/smart-data-putting-consumers-in-control-of-their-data-and-enabling-innovation

⁵¹ https://www.gov.uk/government/groups/modernising-energy-data

- 82. Our proposed licence changes are complementary to DCC Other User services as:
 - a) They take place at the individual consumer level i.e. they are concerned with strengthening the individual non-domestic consumer's data portability rights. It is important to note that existing energy supply licence conditions already oblige suppliers to grant nominated third parties access to consumption data in a timely manner- these licences coexist with DCC services.
 - b) In addition, licence conditions give domestic consumers the right to freely port their historic consumption data to a nominated representative and this coexists with DCC services. 52 Our proposed licences bring non-domestic consumers in line with this (i.e. the right to send a rich snapshot of historic annual consumption data to a third party) rather than requiring data formats which are likely to be more conducive to SMETS-based innovation (such as live ongoing data feeds via Application Programming Interfaces (APIs)). In this sense, the data formats available via DCC services are more likely to be useful when scaling up innovations with more complex functionalities and commercialising them.
 - c) The data will likely be used in different ways. These licence changes are likely to be used in smaller-scale situations, for example granting access to an auditor, energy service company (ESCO) or an innovation company accessing consumption data for the purpose of a small pilot across one or two energy suppliers. If a third party is seeking larger batches of SMETS consumption data (such as for wider commercialisation or research purposes) it is still much more likely that they would pursue DCC avenues given the benefits of doing so (i.e. access to data across many energy suppliers, interoperability of data chains if the customer switches supplier and data formats available as indicated in (b)).
 - d) Our proposed licence changes refer to energy consumption data only. DCC services offer access to a **wider range of SMETS data** including tariff data which the supplier would not be obliged to provide under these proposed licence conditions.
 - e) DCC avenues provide access to SMETS data only, however our policy has been designed with the **mixed non-domestic metering landscape** in mind. In particular, many non-domestic sites have advanced meters due to Ofgem's AMR rollout and the smart meter consumer choice policy. ⁵³ Whilst we anticipate a market shift towards SMETS meters over time, we believe that it is important that the baseline non-domestic smart meter data offer is 'meter neutral' to enable benefits realisation across sites and to ensure that non-domestic customers are not at a disadvantage in their data portability rights because of the embedded nature of AMR in this market. We envisage that for many reasons (e.g. increased data granularity available via

⁵² SLC 22.9- "Where a Domestic Customer requests the licensee to pass on his Historic Consumption Data and/or Supply Number either to the Domestic Customer or to another Electricity Supplier or to any other person, the licensee shall comply with that request free of charge as soon as reasonably practicable."

⁵³ https://www.gov.uk/government/consultations/non-domestic-smart-metering-policy-proposals-and-draft-legal-text

Consumer Access Devices and interconnectivity with other devices), third party innovators are likely to prefer SMETS-based solutions to AMR in the longer-term in any case. However, in the medium-term we must ensure that consumers and their third parties receive a baseline data offer irrespective of meter choice.

- f) Suppliers could in fact choose to use DCC Other User services to meet licence requirements for their SMETS customer base- thereby rendering them complementary as opposed to competing. The Government is progressing work to support the development of DCC Other User services through engagement with relevant stakeholders.
- 83. It is worth noting that because our proposals are concerned with strengthening existing licence conditions regarding third party data access (rather than creating them), we propose initially that the data privacy frameworks within which they operate would remain the same. We acknowledge that this is an area that would need to be monitored to ensure that the privacy framework is suitable for the ways in which the policy is being used over time and we will set out plans for this in our consultation response.
- 84. We welcome stakeholder views on the rationale provided in this section, and on how we can best ensure that any policy changes are complementary to DCC services.

Consultation Questions

- 10. Do you agree with our rationale and evidence for proposing that non-domestic consumers should be able to nominate a third party to receive up to 12 months of their consumption data free of charge and in a machine-readable format via the internet?

 Please give reasons and evidence to support your answer.
- 11. Do you agree with the proposals in Box 4 to streamline the third party consumer consent process? We welcome views on how these can best be defined. Please give reasons and evidence to support your answer.
- 12. Do you agree with our rationale for why our proposed licence changes are complementary to DCC services? IF NO, how do you think they could they be adapted to ensure they are complementary? Please give reasons and evidence to support your answer.

Section 3: The scope of proposed licence changes

Meter type

- 85. As outlined in Sections 1 and 2, we are proposing to improve the non-domestic smart meter consumer data offer provided by energy suppliers. Our proposed licence changes would apply to both AMR and SMETS meter sites, on the basis that:
 - a) Businesses require more engaging access to their smart meter consumption data irrespective of what meter type they currently have -the consumer engagement challenges identified in this consultation are not meter-specific.
 - b) The third party data access challenges are not meter specific- they are related to the processes of obtaining access to consumption data via an energy supplier under existing licences irrespective of meter type.
 - c) Existing licences apply to both AMR and SMETS customers, and we have no evidence to support diverging from this approach.
 - d) The proposed changes have been specifically designed to account for the mixed metering portfolio in the non-domestic market and ensure that there is a baseline data offer available to all consumers, irrespective of their choice of meter type.
 - e) Divergent licence conditions set by meter type may be challenging for suppliers to implement and may complicate the rollout.
- 86. We welcome stakeholder views on this rationale and proposed scope.

Business size

- 87. We have also considered whether our proposed changes should only apply to those smart meter sites that fall within the smart meter mandate (those in profile classes 1-4 or with gas consumption below 732 MWh per annum) or to all non-domestic sites with a SMETS or advanced meter.
- 88. Our minded to position is that the proposed licence changes should apply to **all non-domestic sites with a SMETS or advanced meter**. We estimate this would cover the 3 million meters in scope of the non-domestic smart meter mandate (once smart), plus an

additional 330,000 advanced meters (300,000⁵⁴ electricity and 30,000 gas⁵⁵ outside of the mandate). These are likely to be larger non-domestic organisations covered by the Ofgem advanced meter rollout (such as industrial and commercial businesses). The proposed changes would not cover traditional meters. However, we welcome further evidence to support or refute these figures.

- 89. Our rationale for proposing to extend to these additional (approximate) 330,000 extra meters is as follows:
 - a) The uses for consumption data do not neatly fall inside and outside of the smart metering mandate. This is particularly relevant for broader net zero initiatives, such as to support energy audits, energy efficiency schemes and load shift/time of use innovation.
 - b) Inconsistent smart meter data offers across meters that fall under the same billing arrangements would be inherently complex for suppliers to implement, particularly if they have mixed-portfolio customers with some meters that fall inside and outside of the mandate.
 - c) Inconsistent data offers between businesses with the same metering arrangements would likely be confusing for consumers, who may not understand why they are not eligible for the same data offer as other businesses with the same type of smart meter.
 - d) It ensures that the proposed changes do not create issues in terms of 'costliness to serve', for example if some suppliers specialise in a particular type of non-domestic consumer (such as microbusinesses) it will not put them at a commercial disadvantage.
- 90. We welcome stakeholder views on this rationale and proposed scope.

Consultation Question

13. Do you agree with our rationale for the proposed scope of the policy changes i.e. by meter type and business size? Please give reasons and evidence to support your answer.

⁵⁴ https://www.elexon.co.uk/documents/industry-insights/gross-supplier-market-share-data-reports/2020-gross-supplier-market-share-data-reports/supplier-market-share-data-q3-2020/

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/87894/ND17Jan_SMIP.pdf (page 25 table

Section 4: Creating a policy context that facilitates non-domestic smart metering innovation, including support for industry

Supporting innovation

- 91. Government recognises that engaging non-domestic sites, particularly SMEs, with smart energy management tools and services is not straightforward. We accept that these are busy stakeholders with time and resource pressures, and a range of priorities. However, we have summarised our evidence base which suggests that this can be achieved if innovations are designed and delivered in the right way.
- 92. We also acknowledge that changes to energy supply licence conditions by themselves are not an all-encompassing solution to a complex challenge. We have stopped short of proposing to mandate any particular type of non-domestic smart meter data feedback tool or service at this point because we continue to believe that the market can best deliver upon the diverse needs and motivations of non-domestic smart meter customers.
- 93. However, in stopping short of this, there is a risk that existing challenges around slow market momentum are not addressed, and the benefits of smart meters for non-domestic consumers remain slower to be realised than anticipated. Therefore, it is crucial that industry and third parties use these proposals as a platform (as well as broader DCC innovation routes as discussed) to drive this market forward, and we want to support them to do that.
- 94. We therefore invite stakeholder views on how this can best be achieved, and what types of non-regulatory Government support would be most effective at supporting further development of the market for non-domestic smart energy management tools and services.

Supporting industry to drive uptake of smart meters

95. Another key dependency to market progress in this area is the uptake of smart meters in the non-domestic sector. In June 2020, the Government confirmed its intention to implement a four-year framework to reach market-wide coverage of smart meters by 2025. This will set energy suppliers annual installation targets subject to an annual tolerance level. In June 2021, the Government confirmed the tolerance levels for the first two years of the new framework. This includes distinct tolerances for domestic and non-domestic rollouts for the duration of the framework.

96. Our ambition is that the policy changes set out in this consultation will support energy suppliers in delivering that post-2020 framework, with an improved data offer acting as an additional incentive for non-domestic consumers to have a smart meter installed. This is supported by our evidence (see Paragraph 20) that at present some non-domestic customers expect 'more' by way of data provision to come with their meter than is the case. Therefore, these policy changes are intended to make the consumer offer both more attractive and easier to communicate by industry and wider stakeholders (including Smart Energy GB). We welcome stakeholder views on this point.

Legal text

- 97. It is important that the legal drafting of our proposed changes to energy supply licence conditions matches the policy objectives and intent as set out in this consultation document, to ensure that that when implemented and enforced they facilitate future innovation as intended. We are therefore inviting stakeholder views on the extent to which the draft licence changes, as set out in Annexes A and B alongside this consultation document, adequately capture the policy proposals in this document.
- 98. We are aware that Ofgem will shortly be consulting on amendments to Standard Licence Condition (SLC) 47 to introduce the new access to data framework for settlement purposes. We have discussed the implications of this with Ofgem. We are confident there will be no issues with both statutory consultations running concurrently given that they impact on different areas of SLC 47 with no anticipated overlap. However, we welcome stakeholder feedback on this point in response to Question 16 below.

Consultation Question

- 14. How can Government best support industry to drive forward innovation for non-domestic smart meter data tools and services? Please give reasons and evidence to support your answer.
- 15. Do you agree that an improved non-domestic data offer will support energy suppliers to deliver the post-2020 framework by acting as an additional consumer incentive? Please give reasons and evidence to support your answer.
- 16. Do you agree that the legal text proposed in Annexes A and B adequately captures the proposed policy changes in this consultation? Please give reasons and evidence to support your answer.

Impact Assessment

Costs and benefits

- 99. We have analysed the costs and benefits of our proposals; these are set out in the draft Impact Assessment published alongside this consultation alongside a theory of change.
- 100. Our analysis suggests that under the central scenario, our policy proposals will realise a Net Present Value (NPV) of £813 million and a Benefit-Cost Ratio (BCR) of 16.8. This shows that benefits clearly outweigh costs, reflecting the untapped potential of non-domestic smart energy management data and innovation. Most of the benefits consist of direct consumer energy savings (£600m) and reduced greenhouse gas emissions (£150m).⁵⁶
- 101. To account for uncertainties we undertook extensive sensitivity analysis. The NPV of the policy varies across scenarios, ranging from a minimum of £105m to a maximum of over £3bn, depending on the quality of data offers developed. However, in no modelled scenario does the NPV fall below zero. In addition to this sensitivity analysis, we are also using this consultation to gather further evidence on costs and benefits of proposals and welcome responses from stakeholders to questions 17-21 below. We are particularly interested in responses from energy suppliers to these questions.
- 102. While it is likely that the costs to energy suppliers resulting from the policy will be passed through to tariffs, we do not expect this to be felt by consumers once spread across all non-domestic energy consumers in Great Britain (less than £3 per customer per year on average). Generally, we expect these small costs to be far outweighed by the benefits resulting from energy savings.

Equalities implications

- 103. The Public Sector Equality Duty⁵⁷ (the equality duty) is a legal requirement under the Equality Act 2010, whereby public sector organisations must consider people with protected characteristics when planning, implementing, and reviewing policies and making decisions.
- 104. It is therefore important that we analyse the impacts of our proposals on people with protected characteristics. We have identified the below implications of our policy proposals on consumers with protected characteristics:

⁵⁶ In total, the policy is estimated to lead to a reduction in greenhouse gas emissions of 3.3 MtCO2e (0.7 MtCO2e traded and 2.6 MtCO2e non-traded).

⁵⁷ https://www.gov.uk/government/publications/public-sector-equality-duty

- a) The risk of costs being passed onto consumers with protected characteristics.
- b) The risk of data provision not being accessible to those who have a protected characteristic.
- c) The risk that proposals make it easier for third parties (acting with consent) to access energy consumption data, therefore we would need to consider any data privacy implications.
- 105. These implications are explored in greater detail in the draft Impact Assessment published alongside this consultation (Annex C).
- 106. We consider the overall benefits (and equalities opportunities) of these policy proposals outweigh the risks identified, but we will consider as part of our consultation response what steps may be required to mitigate such risks. We welcome stakeholders' views (as well as any evidence you can provide) on any further equalities impacts in relation to our proposals that have not been considered and how we can best mitigate the relevant risks.

Monitoring and evaluation

- 107. Plans for monitoring and evaluation of the policy are set out in the draft Impact Assessment published alongside this consultation. The programme will monitor the ongoing effects of the policy including through energy supplier engagement and data collection and small business survey data.
- 108. A Post-Implementation Review (PIR) of these policy changes will be conducted as part of the Programme's ongoing benefits monitoring and evaluation activities and published in line with our legal requirements.

Consultation Questions- costs and benefits

We are particularly interested in responses from energy suppliers and other innovators in this section.

- 17. What types of energy supplier data offerings do you think are likely to emerge in response to the policy changes in Box 1 and Box 2? We welcome views from energy suppliers on this question in particular. Please give reasons and evidence to support your answer.
 - 18. Under our proposed licence changes, how do you think suppliers would differentiate their "for free" data offering versus chargeable services, and what do you think would drive this?
- 19. What do you foresee as being the primary costs and benefits (and to whom) of the proposed measures in this consultation? Please quantify these as far as possible (though we also welcome views on any wider system benefits which may be harder to quantify).
- 20. In your experience, how much does it cost to develop varying levels of data offerings (ranging from emailed 'visuals' of consumption through to online platforms, apps and more complex services). Please quantify this as far as possible. We are particularly interested in breakdowns of one-off initial investment costs vs ongoing running costs, fixed vs variable costs and costs of in-house development versus commissioned out.
 - 21. Do you think there are any equalities impacts in relation to our proposals that have not been considered above? Please outline what these are, their potential impacts and how Government could take steps to mitigate them. Please give reasons and evidence to support your answer.

Next steps

- 109. Stakeholders and other interested parties are invited to provide their views on the Government's proposed approach and, more specifically, the questions set out in this consultation. A summary of all questions has been included in the following section for ease of reference.
- 110. This consultation closes at 10am on the 24th September. Details on how to respond to this consultation have been provided in the General Information section in page 5 of this document.

Summary of Questions

- 1. Do you agree with the rationale and evidence underpinning our proposals to improve the smart meter data offer for non-domestic consumers? Please give reasons and evidence to support your answer.
- 2. Overall, do you agree that these proposals achieve the right balance between consumer needs and supporting market-led innovation in non-domestic smart energy management tools and services? Please give reasons and evidence to support your answer.
- 3. Do you agree with the rationale and evidence underpinning our proposals outlined in Box 1 (that non-domestic smart meter customers must be entitled to a minimum baseline of free access to information based on their energy consumption data, presented to them in a user-accessible format to allow insights into their energy consumption and usage)? Please give reasons and evidence to support your answer.
- 4. Do you agree with our evidence that data provision (which meets the criteria in Box 1) should be provided by default by the supplier as part of the standard smart meter offer without the customer having to request it in order to drive customer engagement? Please give reasons and evidence to support your answer.
- 5. Do you agree that the proposed implementation timeframes are sufficient to enable all suppliers to meet the free baseline offer? Please give reasons and evidence to support your answer.
- 6. Do you agree that a free baseline data offer is compatible with market-leading functionalities and services? Please give reasons and evidence to support your answer.
- 7. Do you agree with the proposals around timeliness of data provision, as set out in Box 2? Please give reasons and evidence to support your answer.
- 8. Do you agree with the rationale and evidence supporting our proposals for suppliers to regularly inform consumers of their available means for accessing a free version of their energy consumption data? Please give reasons and evidence to support your answer.
- 9. Do you have any views on whether and how the market factors identified (meter storage, the role of DCDAs, half-hourly data schedules and 'smart type' meters) might affect the proposals outlined? Please give reasons and evidence to support your answer.
- 10. Do you agree with our rationale and evidence for proposing that non-domestic consumers should be able to nominate a third party to receive up to 12 months of their consumption data free of charge and in a machine-readable format via the internet? Please give reasons and evidence to support your answer.

- 11. Do you agree with the proposals in Box 4 to streamline the third party consumer consent process? We welcome views on how these can best be defined. Please give reasons and evidence to support your answer.
- 12. Do you agree with our rationale for why our proposed licence changes are complementary to DCC services? IF NO, how do you think they could they be adapted to ensure they are complementary? Please give reasons and evidence to support your answer.
- 13. Do you agree with our rationale for the proposed scope of the policy changes i.e. by meter type and business size? Please give reasons and evidence to support your answer.
- 14. How can Government best support industry to drive forward innovation for non-domestic smart meter data tools and services? Please give reasons and evidence to support your answer.
- 15. Do you agree that an improved non-domestic data offer will support energy suppliers to deliver the post-2020 framework by acting as an additional consumer incentive? Please give reasons and evidence to support your answer.
- 16. Do you agree that the legal text proposed in Annexes A and B adequately captures the proposed policy changes in this consultation? Please give reasons and evidence to support your answer.
- 17. What types of energy supplier data offerings do you think are likely to emerge in response to the policy changes in Box 1 and Box 2? We welcome views from energy suppliers on this question in particular. Please give reasons and evidence to support your answer.
- 18. Under our proposed licence changes, how do you think suppliers would differentiate their "for free" data offering versus chargeable services, and what do you think would drive this?
- 19. What do you foresee as being the primary costs and benefits (and to whom) of the proposed measures in this consultation? Please quantify these as far as possible (though we also welcome views on any wider system benefits which may be harder to quantify).
- 20. In your experience, how much does it cost to develop varying levels of data offerings (ranging from emailed 'visuals' of consumption through to online platforms, apps and more complex services). Please quantify this as far as possible. We are particularly interested in breakdowns of one-off initial investment costs vs ongoing running costs, fixed vs variable costs and costs of in-house development versus commissioned out.
- 21. Do you think there are any equalities impacts in relation to our proposals that have not been considered above? Please outline what these are, their potential impacts and how Government could take steps to mitigate them. Please give reasons and evidence to support your answer.

This consultation is available from: www.gov.uk/government/consultations/maximising-non-domestic-smart-meter-consumer-benefits-improving-the-data-offer-and-enabling-innovation
If you need a version of this document in a more accessible format, please email enquiries@beis.gov.uk . Please tell us what format you need. It will help us if you say what assistive technology you use.